

CA-EAP: A MULTI-TASK SOFTWARE PACKAGE FOR THE TEACHING OF ACADEMIC WRITING

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1. Introduction: This paper describes CA-EAP software, which has been developed, and continues to be developed by Jon Mills at the University of Luton. The purpose of CA-EAP is to provide online teaching materials for the *Academic English and Study Skills* module for first year undergraduate students who are studying for a degree at Luton University and whose first language is not English. This module attracts approximately 150 students who are taught by three teachers in classes of up to 20 students. Foreign students who are studying in what is not their first language need help with their English. However since they already have the difficulty of studying in what is not their first language, it was decided that English language support should not increase their workload. These modules, therefore, form part of the modular credit scheme which means that students who attend them obtain credit towards their degree. Students attend one 3-hour session per week, which takes place in a computer lab. CA-EAP provides all the materials for the writing component for this module. In all, CA-EAP provides approximately 40 hours of writing activities.

The syllabus is functional. CA-EAP aims to explain and provide practice in a number of language functions that are employed in academic discourse: definition, classification, cause and effect, comparison and contrast, illustration and exemplification, generalisation and qualification, analogy, evidence, interpretation of data, argument and thesis.

2. The Virtual Classroom: Mills (1997) describes the management of the computer mediated communication that takes place in the virtual classroom. Through a system of networked computers, students and their teacher are able to communicate in cyberspace. The virtual classroom is the area in which this computer mediated discourse takes place between class members. Virtual classroom management involves, amongst other things, the maintenance of links not only between human participants but also between human participants and androids. Androids include such automata as the on-line library catalogue, help files and on-line dictionaries (See Figure 1). CA-EAP provides seamless integration with the word-processor and a concordancer, and permits student's scripts to be exchanged via the server for peer critiquing.

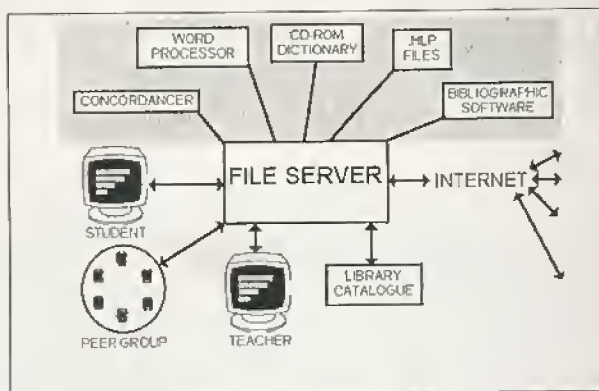


Figure 1

On-line communication in cyberspace focuses on the written form. Discussion is still possible; use of shared first language is still possible. However extra-linguistic and paralinguistic features are not communicated via the digital word. In class, facial expression, body language and tone of voice all contribute to the act of communication. On-line the only message is the text. This narrow expressive range brings about a focus on simple, clear and effective writing. The medium can foster a surprisingly close relationship between teacher and student. A detailed written comment somehow carries more authority and impact than spoken words. Students, eager to initiate a real dialogue, sharpen their writing skills still further as they argue their points. Successful computer communication demands a great deal of empathy between writer and reader. The writer is forced to put her/himself in the reader's place and anticipate what s/he needs.

The medium is particularly adapted to the teaching of argumentation. Students post a claim plus three reasons, each backed by evidence, plus a brief rebuttal of major counter-arguments. This elicits a powerful response from their peers, who pound the keyboards to argue specific points. The resulting position papers benefit from these on-line arguments by demonstrating far more rhetorical sensitivity, fewer broad generalities and a strong sense of arguing with reasons plus proof. One might argue that this experience could be duplicated by class discussion. Only partially so. Not only is the on-line debate a writing experience, but the entire discussion can be printed out or saved onto disk.

3. Activity Typology: Each lesson incorporates a variety of tasks and task types including pages of exposition, drills, short essay writing, peer critiquing and use of a concordancer.

Expository pages explain and exemplify the functions and their exponents for the lesson in question. This involves the passive intake of knowledge by the student. Figure 2 shows

an expository page which forms part of a lesson to teach the rhetoric of comparison and contrast. This particular page shows the exponent, 'X is virtually as long as ...' or 'X is almost as cheap as'

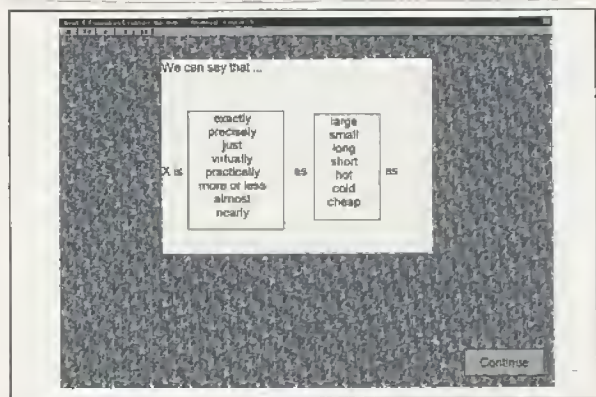


Figure 2

Drill type activities provide the student with the opportunity to practise the structures and vocabulary that have been encountered in the expository pages for the lesson that is being undertaken. Drill exercises are marked automatically by the computer and the student can work at their own pace. Three types of drill have been employed in CA-EAP: gap-fill, multiple choice and hot spot.

In the case of a gap-fill exercise, the student is required to fill the spaces in a given sentence in order to practise use of the exponent that is being taught. So for example in the exercise shown in Figure 3, the student is practising the comparison and contrast exponent that we saw in Figure 2. The answer is, of course, 'The Thames is **nearly** as long **as** the Severn'.

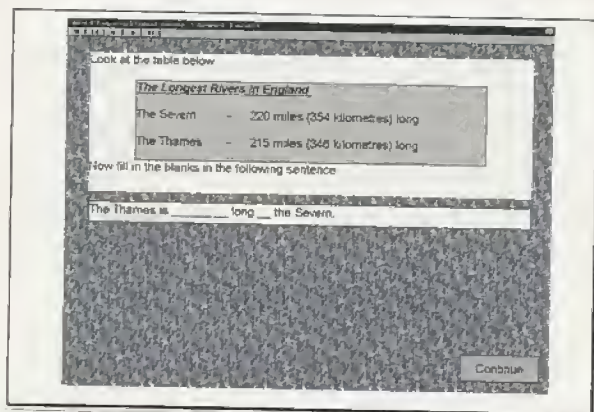


Figure 3

The multiple-choice exercise requires the student to distinguish the correct answer from a number of distracters. The example in Figure 4 is from a lesson on the rhetoric of definition and classification. A poor definition of the word 'lecturer' has been given and the student has to identify the reason why it is a poor definition.

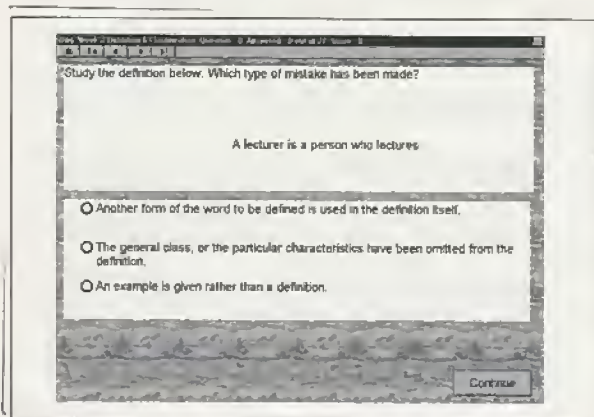


Figure 4

organisation, and later proof read each other's second or third draft for form and mechanics.

The method works like this (see Figure 7). Students save their texts on the central fileserver using a pseudonym given to them by the teacher. Students are then allotted another student's text to download from the server. Working from a feedback sheet prepared by the teacher, students write the answer to the questions about the text on screen in front of them by inserting revision annotations into that text. When all the students have finished critiquing, the files are saved and the students retrieve their original files from the server. The original author reviews the revision marks in his/her text and accepts, rejects or ignores each change.

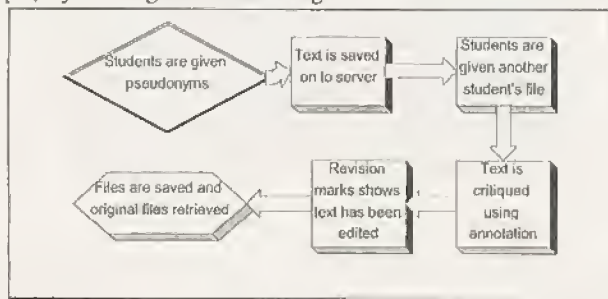


Figure 7

Recent research in America has shown that when students peer critique each other's work, less credibility is given to the work of female students even by other female students. For this reason, we have adopted a system whereby students are given pseudonyms, such as 'Chris' or 'Nic', which can refer to either sex. Students save their texts under their allotted pseudonyms (see Figure 8) and the texts are then exchanged in cyberspace for critiquing. The virtual classroom thus provides anonymity by which students not only become androgynous but also have their race, creed colour, etc. hidden. Shyer, more introverted students lose their inhibitions as they take on their new personas.



Figure 8

Next the students are given another student's text to critique. They do this by using *MS-Word*'s special revision marking facility. Revision marks help the critiquing process by showing the changes that have been made to a text since the last version. *MS-Word* uses special formatting, such as underlining, strikethrough characters and different colour to show edited text. In the example that we see in Figure 9, the student who is critiquing has decided that they think that 'It is in the south of Spain' should be 'It is on the south of Spain'. Of course the students who critique do not always get it right.

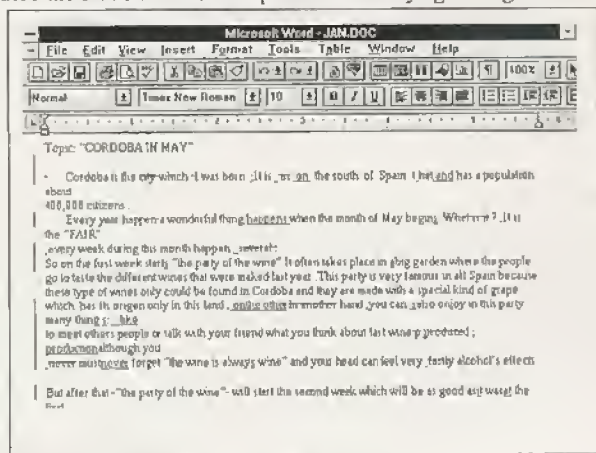


Figure 9

After critiquing the files are exchanged over the network so that each student receives their original text. At this stage the students can either accept or reject the corrections. When students are uncertain about the correctness of the revisions to their text they often ask the teacher to arbitrate. It is important not to simply give the student the 'correct' version. A teacher cannot always be available to support students. It is, therefore, vital that students learn how to find the 'correct' form on their own. In this situation, it is best to direct the student to obtain a concordance from an expert corpus so that the item in question may be compared with examples from authentic text. Let us suppose that a student has received the text shown in Figure 9. S/he has doubts about the revision of 'It is in the south of Spain' to 'It is on the south of Spain'. S/he uses *MicroConcord* concordancing software to obtain a concordance of 'the south' (see Figure 10). From this it can be seen that 'in the south' is the normal collocation for this usage. It can furthermore be observed from this concordance that native speakers of English sometimes spell 'south' beginning with a capital letter and sometimes beginning with a lower-case letter. (For further discussion on the use of concordancers in the foreign language class see Mills 1996b.)



Figure 10

4. **The Task Algorithm:** Figure 11 shows how the various activities that comprise a lesson may be sequenced. CA-EAP is intended for classroom use with a teacher present. Students work at their own pace while reading expository pages and doing the drill tasks. However lock-step is necessary at various points during each lesson. For example, it is necessary to lock-step commencement of peer critiquing. It is necessary for the teacher to monitor students' progress and s/he may also wish to lock-step at other stages during the lesson, such as the commencement of the writing task.

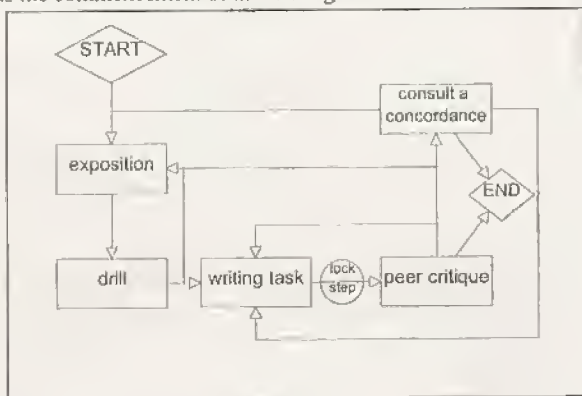


Figure 11

5. **Discussion:** CA-EAP has been found to have a number of strengths. It is robust; it is difficult to cause the system to crash. It is user friendly. Operation is on the whole fairly intuitive so that students and teachers rarely experience difficulty in using the system. It provides a variety of activities and activity types for each lesson. For much of the lesson, students are able to work at their own pace. On the whole, students report that

they enjoy using the software and that they find the lessons helpful. Furthermore students like the anonymity that the virtual classroom provides. We have observed that our foreign students who attend the classes and use CA-EAP, demonstrate a great improvement in their academic writing. In fact, at the culmination of the course, they frequently display greater essay writing proficiency than our native speaker students who do not attend the classes.

On the other hand, there are some attributes with which we are not entirely satisfied. It has been observed that drill exercises don't always match the student's level of competence. In a class containing various levels of proficiency, some of the students may finish all the drill exercises quite quickly, whilst the less competent students require much more time. This can make it difficult to lock step at the commencement of writing activities. CA-EAP is not platform independent and requires *Qmark Presenter* to run. This means that, in its current state, CA-EAP cannot easily be made available to other institutions.

CA-EAP might be improved in a number of ways. Implementation in HTML with Java or Javascript applets would enable platform independence and facilitate distribution over a network. Alternatively the system could be compiled as a .EXE executable program. An intelligent tutoring system could be linked with the drill activities. This system could automatically adjust to student's level of competence for drill exercises and direct students to a help file after two failed attempts. An intelligent tutoring system could also be used in order to grammatically and semantically parse student input. This would facilitate more open ended drill activities in which students are required to type whole sentences rather than gap-fill or multiple choice responses. Another useful improvement would be to have the system automatically assign pseudonyms for peer critiquing.

Areas for future research and development include the integration intelligent tutoring and the development of drill exercises to teach certain aspects of literature review: summary, paraphrase, synthesis and referencing.

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